

wherein the pressure layer is provided on the packed bed of the solid catalyst and/or the solid adsorbent.

2. (Twice Amended) An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water, comprising:

a packed bed of the solid catalyst and/or the solid adsorbent; [and]

a water-permeable pressure layer having a load which can suppress a deformation of the packed bed of the solid catalyst and/or the solid adsorbent; and

a vertical partition configured to divide a boundary area between an upper part of the packed bed and the water-permeable pressure layer into a plurality of respective segments formed in a vertical direction;

wherein said water-permeable pressure layer is provided on the packed bed of the solid catalyst and/or the solid adsorbent.

6. (Twice Amended) [The] An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water [according to claim 2], comprising:

a packed bed of the solid catalyst and/or the solid adsorbent; and

a water-permeable pressure layer having a load which can suppress a deformation of the packed bed of the solid catalyst and/or the solid adsorbent;

wherein the water-permeable pressure layer is provided on the packed bed of the solid catalyst and/or the solid adsorbent; and

wherein the water-permeable pressure layer is a substance having a plurality of rigid metal particles or ceramic particles.

Claim 8, line 1, change "3" to --1 or 2--.

Claim 9, line 1, change "3" to --1 or 2--.

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Sub D3
10. (Twice Amended) [The] ~~An~~ apparatus according to claim 1, further comprising:
a layer configured to [for dispersing and mitigating] disperse and mitigate an upward
stream of the waste water and/or a waste gas, said layer being provided under the packed bed.

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13. (Twice Amended) [The] ~~An~~ apparatus for preventing abrasion of a solid catalyst
and/or a solid adsorbent while treating waste water [according to claim 10], comprising:
a packed bed of the solid catalyst and/or the solid adsorbent;
a pressure layer having a load which can suppress a deformation or a movement of a
surface of the packed bed of the solid catalyst and/or the solid adsorbent; and
a layer configured to disperse and mitigate an upward stream of the waste water or a
waste gas, said layer being provided under the packed bed;
wherein the pressure layer is provided on the packed bed of the solid catalyst and/or the
solid adsorbent;
wherein the dispersing and mitigating layer is a plurality of rigid metallic particles or
ceramic particles.

Sub D4
14. (Twice Amended) [The] ~~An~~ apparatus according to claim 13 or 30, wherein each
one of the rigid metallic particles or ceramic [particle] particles has an average diameter of 3 to
30 mm.

Sub. D4 cont.
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cont'd

15. (Twice Amended) An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water, comprising:
a packed bed of the solid catalyst and/or the solid adsorbent; and
a layer configured to [for dispersing and mitigating] disperse and mitigate an upward stream of the waste water and/or a waste gas;
wherein the dispersing and mitigating layer is provided under the packed bed of the solid catalyst and/or the solid adsorbent; and
wherein the dispersing and mitigating layer is a substance having a plurality of rigid metallic particles or ceramic particles.

Sub H1

19. (Twice Amended) [The] An apparatus according to claim [18] 15, wherein each one of the rigid metallic particles or ceramic [particle] particles has an average diameter of 3 to 30 mm.

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20. (Twice Amended) [The] An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water [according to claim 1], [further] comprising:
a packed bed of the solid catalyst and/or the solid adsorbent;
a pressure layer having a load which can suppress a deformation or a movement of a surface of the packed bed of the solid catalyst and/or the solid adsorbent; and
a layer configured to disperse and mitigate an upward stream of the waste water or a waste gas, said layer being provided under the packed bed;
wherein the packed bed is provided in a wet-oxidation treatment unit.

Please add the following new Claims 21-30:

--21. An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water, comprising:

a packed bed of the solid catalyst and/or the solid adsorbent;

a pressure layer having a load which can suppress a deformation or a movement of a surface of the packed bed of the solid catalyst and/or the solid adsorbent; and

a vertical partition configured to divide a boundary area between an upper part of the packed bed and the pressure layer into a plurality of respective segments formed in a vertical direction;

wherein the pressure layer is provided on the packed bed of the solid catalyst and/or the solid adsorbent; and

wherein the packed bed is provided in a wet-oxidation treatment unit.

22. An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water, comprising:

a packed bed of the solid catalyst and/or the solid adsorbent;

a water-permeable pressure layer having a load which can suppress a deformation of the packed bed of the solid catalyst and/or the solid adsorbent;

a vertical partition configured to divide a boundary area between an upper part of the packed bed and the water-permeable pressure layer into a plurality of respective segments formed in a vertical direction;

wherein said water-permeable pressure layer is provided on the packed bed of the solid catalyst and/or the solid adsorbent; and

wherein the packed bed is provided in a wet-oxidation treatment unit.

Sub. C2

23. An apparatus for prevent abrasion of a solid catalyst and/or a solid adsorbent while treating waste water, comprising:

a packed bed of the solid catalyst and/or the solid adsorbent; and

a water-permeable pressure layer having a load which can suppress a deformation of the packed bed of the solid catalyst and/or the solid adsorbent;

wherein the water-permeable pressure layer is provided on the packed bed of the solid catalyst and/or the solid adsorbent;

wherein the water-permeable pressure layer is a substance having a plurality of rigid metal particles or ceramic particles; and

wherein the packed bed is provided in a wet-oxidation treatment unit.

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cont'd

24. An apparatus according to claim 1, further comprising:

a layer configured to disperse and mitigate an upward stream of the waste water and/or a waste gas, said layer being provided under the packed bed;

wherein the packed bed is provided in a wet oxidation treatment unit.

25. An apparatus according to claim 2, further comprising:

a layer configured to disperse and mitigate an upward steam of the waste water and/or a waste gas, said layer being provided under the packed bed;

wherein the packed bed is provided in a wet-oxidation treatment unit.

26. An apparatus according to claim 6, further comprising:

a layer configured to disperse and mitigate an upward stream of the waste water and/or a waste gas, said layer being provided under the packed bed;

~~wherein the packed bed is provided in a wet-oxidation treatment unit.~~

Sub D6
27. An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water, comprising:

a packed bed of the solid catalyst and/or the solid adsorbent; and

a layer configured to disperse and mitigate an upward stream of the waste water and/or a waste gas;

wherein the dispersing and mitigating layer is provided under the packed bed of the solid catalyst and/or the solid adsorbent;

wherein the dispersing and mitigating layer is a substance having a plurality of rigid metallic particles or ceramic particles; and

wherein the packed bed is provided in a wet-oxidation treatment unit.

B6
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28. An apparatus according to claim 2, further comprising:

a layer configured to disperse and mitigate an upward stream of the waste water and/or a waste gas, said layer being provided under the packed bed.

29. An apparatus according to claim 6, further comprising:

a layer configured to disperse and mitigate an upward stream of the waste water and/or a waste gas, said layer being provided under the packed bed.

Sub D7
30. An apparatus for preventing abrasion of a solid catalyst and/or a solid adsorbent while treating waste water comprising:

a packed bed of the solid catalyst and/or the solid adsorbent;